33. An isolated polynucleotide encoding a polypeptide of Claim 32 or the full complement to the isolated polynucleotide.

34. The isolated polypeptide of claim 28, wherein the immunogenic fragment of (b) comprises at least 20 amino acids.

35. The isolated polypeptide of Claim 28 wherein the amino acid sequence of (a) is identical to SEQ ID NO:4

36. An isolated polynucleotide encoding a polypeptide of Claim 35 or the full complement to the isolated polynucleotide.

37. A process for expressing the polynucleotide of Claim 36 comprising transforming a host cell with an expression vector comprising the polynucleotide and culturing the host cell under conditions sufficient for expression of the polynucleotide.

38. The isolated polypeptide of Claim 28 wherein the amino acid sequence of (a) is identical to SEQ ID NO:6.

39. An isolated polynucleotide encoding a polypeptide of Claim 38 or the full complement to the isolated polynucleotide.

40. A process for expressing the polynucleotide of Claim 39 comprising transforming a host cell with an expression vector comprising the polynucleotide and culturing the host cell under conditions sufficient for expression of the polynucleotide.

41. A fusion protein comprising the isolated polypeptide of Claim 28.

42. An isolated polynucleotide comprising the polynucleotide of SEQ ID NO:3 or 5.

43. An isolated polypeptide consisting of an amino acid sequence matching SEQ ID NO:2.

44. An isolated polynucleotide encoding a polypeptide of Claim 43 or the full complement to the polypeptide.

45. An isolated polynucleotide segment comprising a polynucleotide sequence or the full complement of the entire length of the polynucleotide sequence, wherein the polynucleotide sequence hybridizes to the full complement of SEQ ID NO:3 minus the complement of any stop codon, wherein the hybridization conditions include incubation at 42°C in a solution comprising: 50% formamide, 5x SSC (150mM NaCl, 15mM trisodium citrate), 50 mM sodium phosphate (pH7.6), 5x Denhardt's solution, 10% dextran sulfate, and 20 micrograms/ml denatured, sheared salmon sperm DNA, followed by washing in 0.1x SSC at 65°C; and, wherein the polynucleotide sequence is identical to SEQ ID NO:3 minus any terminal stop codon, except that, over the entire length corresponding to SEQ ID NO:3 minus any terminal stop codon, $\mathbf{n_n}$ nucleotides are substituted, inserted or deleted, wherein $\mathbf{n_n}$ satisfies the following expression

$$\mathbf{n_n \leq x_n - (x_n \bullet y)}$$

wherein $\mathbf{x_n}$ is the total number of nucleotides in SEQ ID NO:3 minus any terminal stop codon, **y** is at least 0.95, and wherein any non-integer product of $\mathbf{x_n}$ and **y** is rounded down to the nearest integer before subtracting the product from $\mathbf{x_n}$; and wherein the polynucleotide sequence detects *Neisseria meningitidis*.

46. An expression vector comprising the isolated polynucleotide of Claim 29.

47. A host cell transformed with the expression vector of Claim 46.

48. A vaccine comprising the polypeptide of Claim 28 and a pharmaceutically acceptable carrier.

49. The vaccine of Claim 48, wherein the vaccine comprises at least one other *Neisseria meningitidis* antigen.

50. An antibody immunospecific for the polypeptide or immunogenic fragment of Claim 28.